

**AMENDMENTS TO THE SPECIFICATION:**

Replace the paragraph bridging pages 9-11 with the amended paragraph as follows:

Another object of the present invention is a device for inflating a tyre on a vehicle wheel comprising:

- a) at least one automatically consultable information medium carried by at least one of the components of the wheel whose tyre is to be inflated, the said information medium carrying a first temperature sensor able to supply the value of the temperature of the tyre on the wheel and being able to supply, when it is consulted, at least one data item that can be used for inflating the tyre,
- b) a consultation and transmission means able to automatically consult the said information medium and to automatically transmit the said at least one data item to a programmable data management unit,
- c) the said programmable data management unit,
- d) a second temperature sensor for measuring the ambient temperature on the site of the inflation machine,
- e) calculation means included in the said programmable data management unit for calculating a corrected set value for the inflation pressure of the tyre to be inflated, on the basis of a set value for the inflation pressure defined from at least one data item supplied to the said programmable data management unit, and taking account of the value of the temperature of the tyre supplied by the first temperature sensor, the programmable data management unit being programmed so that the said calculation means calculate an average value of the said ambient temperature

over a predefined elapsed time period, and calculate the corrected set value  $P_{cc}$  according to the formula:

$$\underline{P_{cc} = P_c \cdot \frac{T_p}{T_{ref}}}$$

in which  $P_c$  is the said set value for the inflation pressure,  $T_p$  is the temperature of tyre supplied by the first temperature sensor and  $T_{ref}$  is a variable reference temperature that is chosen as being the lowest temperature from amongst the instantaneous ambient temperature measured on the site of the inflation machine by the second temperature sensor and the said calculated average value of the ambient temperature, the pressures  $P_c$  and  $P_{cc}$  being in absolute value and the temperatures  $T_p$  and  $T_{ref}$  being in degrees K,

f) at least one means for measuring the value of the pressure of the air inside the said tyre to be inflated and for supplying the value of the measured pressure to the said programmable data management unit,

g) an inflation machine, controlled by the said programmable data management unit for adjusting the value of the pressure of the air inside the tyre to the correct set value ( $P_{cc}$ ) calculated by the said calculation means.